

Characterisation of T7-Promoter variants G6 & H10

Dosage response Characterization:

Day 1: Culture of pETM5-G6-mCherry and pETM6-H10-mCherry in LB with ampicillin.

Day 2:

Step1: 1:99 dilution of overnight cultures of pETM5-G6-mCherry and pETM6-H10-mCherry, and allow to grow to mid-log phase.

Step2: IPTG of different concentration were prepared. 2mM, 0.2mM, 0.02mM, 0.002mM, 0.0002mM and 0.00002mM.

Step3: 1:1 dilution of culture in mid-log phase with LB-IPTG in 96 well plate. The cultures were allowed to grow for 8 hours.

Step4: mCherry expression were measured by Tecan plate reader (m1000 pro)

Temporal response Characterization:

Day 1: Culture of pETM5-G6-mCherry and pETM6-H10-mCherry in LB with ampicillin.

Day 2:

Step1: 1:99 dilution of overnight cultures of pETM5-G6-mCherry and pETM6-H10-mCherry, and allow to grow to mid-log phase.

Step2: 2mM IPTG were prepared.

Step3: 1:1 dilution of culture in mid-log phase with LB-IPTG in 96 well plate. The cultures were allowed to grow for 8 hours.

Step4: mCherry expression were measured by Tecan plate reader (m1000 pro) at 1 hour interval.